

## **Chapter 11: New Frontiers, New Resources** **(1860-1900)**

### **Section 1 The Conquest of the Indians:**

*We did not ask you white men to come here. The Great Spirit gave us this country as a home. You had yours. We did not interfere with you...But you have come here; you are taking my land from me...You say, why do you not become civilized? We do not want your civilization!*

Chief Crazy Horse spoke for all the Indians of the Great Plains when he uttered these words. Although angered by the coming of the settlers, the Indians were nevertheless unable to halt the drive westward.

#### **THE GEOGRAPHY OF THE FRONTIER**

At first, most Americans were content to let the Indians remain on the Great Plains forever. From the 100<sup>th</sup> meridian west to the Rocky Mountains, pioneers had noted, the annual rainfall gradually decreases. As a result, maps of the early 1800s called the plains the “Great American Desert.” The idea that the West was an uninhabited wasteland was wrong, however. First, far from being barren, the region had many riches to offer. The fertile Plains soil could support both ranching and farming. Valuable minerals were buried in the mountains. Second, both the agricultural frontier and the mining frontier were inhabited by Indians. These conditions set the stage for the two great dramas of westward expansion—the destruction of the Indians and the development of the region’s natural resources.

By the 1850s, pioneers passing through the Great Plains were reporting that much of the country was good for cattle ranching and farming. White settlers gradually began to move onto the Plains. Soon, this westward procession swelled into a flood. The Civil War played an important role. Needing food for its soldiers and raw materials for its factories, the North encouraged people to move west. The war’s end brought another spurt of settlement, with thousands of ex-soldiers heading west. As industry continued to expand and cities continued to grow in the late 1800s, the country’s appetite for the products of western mines, ranches, and farms reached new heights.

But it was one thing to want what the West had to offer, and another thing to get at it. Here is where the railroad came in. The railroad carried settlers west, supplied them with products from the East, and transported western products back to eastern factories. The completion of the transcontinental railroad in 1869 marked the end of the West’s isolation from the rest of the country. It also sealed the fate of the Indians.

#### **CONFLICT ON THE PLAINS**

Many Americans in the 1800s argued that development of the West required total defeat of the Indians. They asked how two cultures so different from each other could live side by side.

The Indians knew that they had to fight the settlers or lose their land. The Indians had good cause to view the Plains as their legal homeland. In the early 1800s the federal government had designated the Plains as “one big reservation” for Indians. However, after heavy settlement of Oregon and California started in the 1840s, people clamored for a new policy.

Federal officials eventually bowed to public pressure and switched to a policy of concentration. Under that policy, the tribes would allow settlers free passage through their territories and would confine their hunting to specific areas. In an 1851 treaty with the federal government, several Indian tribes agreed to these conditions.

The policy of concentration failed for two reasons. First, Plains Indians depended on the buffalo for food and most other essentials of life. Thus they wandered outside their assigned boundaries in pursuit of game. Second, the discovery of gold in Colorado in 1858 unleashed hordes of prospectors. These prospectors had little respect for Indian territorial rights.

The federal government tried to reach a new agreement with the Indians. Yet hopes for peace were dashed in 1864. After a few skirmishes between whites and Indians in Colorado, Chief Black Kettle of the Cheyenne had agreed to an armistice. Colonel John M. Chivington, head of Colorado’s militia, knew nothing of the armistice. It was dawn on November 28, 1864. Chivington and 1,000 troops swept into the sleeping Cheyenne camp on the banks of the Sand Creek. Ignoring an American flag and a white flag that Black Kettle raised as a sign of peace, the attackers massacred some 450 Indians. An eyewitness later recalled the Sand Creek Massacre:

*There seemed to be indiscriminate slaughter of men, women, and children. There were some 30 or 40 women collected in a hole for protection; they sent out a little girl about six years old with a white flag on a stick; she had not proceeded but a few steps when she was shot and killed. All the squaws in that hole were afterwards killed....*

Fighting also broke out between whites and the Sioux. In 1862-1863 the Sioux raided white settlements in Minnesota. That conflict ended when Little Crow, the Sioux Leader, was killed. The government forced the Sioux to move westward to Montana. In 1865 the government began building a road through Sioux lands in Montana. Once again the Sioux went to war. In December 1866, a band of Sioux led by Red Cloud ambushed a convoy traveling along the new road. Captain W. J. Fetterman and all 82 soldiers in his party were wiped out.

The Sioux War ended in 1868. In that year a peace commission from Washington, D.C., replaced the concentration policy with a policy of reservations. These were small, sharply defined areas supervised by federal officials and closed off to non-Indian settlement.

While some Indians agreed to move to reservations, others refused. For another six years Indians battled army troops. The army ultimately defeated the Indians, and by 1874 a number of small reservations, usually on the poorest lands, dotted the Plains.

## **THE END OF THE INDIAN WARS**

In 1876 the lure of gold struck once again, this time in the Dakota Territory. Thousands of prospectors tramped across the territory to reach new finds in the Black Hills—lands sacred to the Sioux. Furious, the Sioux declared war.

The most famous battle of what was called the Second Sioux War took place on June 25, 1876. On that day, an arrogant and flamboyant general named George Armstrong Custer swooped down on a Sioux camp. The Sioux, led by Chief Sitting Bull, far outnumbered Custer's forces. With such outstanding warriors as Crazy Horse, the Sioux killed all 265 soldiers at the Battle of Little Bighorn—also called "Custer's Last Stand."

Little Bighorn was the last great Indian victory on the Plains. Though they fought bravely, the Indians could not match the army's

technology. The telegraph gave the army speedy communication: troops could now be called out at the first sign of trouble. The railroad allowed the army to outrun even the swiftest horses. And with the six-shot Colt revolver and other modern weapons, army soldiers held a huge advantage in firepower. The army also benefited from the courage and professionalism of its soldiers, including two highly decorated black units, the 9<sup>th</sup> and 10<sup>th</sup> Cavalry.

Still, the Indians did not give up easily. Fighting between Indians and the army went on for over a decade after the Battle of Little Bighorn, on the Plains and elsewhere. In 1877 the Nez Perce of Oregon went to war rather than give up their lands. Pursued by government troops, Chief Joseph led his people on a harrowing 1,500-mile trek across Oregon, Idaho, and Montana. They were captured just a few miles from the Canadian border. In New Mexico, the brilliant military leader Geronimo led the Apache in a fierce struggle against the government until his capture in 1886.

The last Indian "battle" of the century took place in 1890 at Wounded Knee, South Dakota. There a massacre happened as army troops were disarming Sioux warriors. The Sioux were no match for the soldiers, who came armed with newly developed machine guns. In the end some 200 Indian men, women, and children lay dead in the snow.

By 1890 thousands of Indians had perished in battles to keep their land. Thousands more had died of starvation and exposure. Even the Indian Territory had shrunk. The federal government bought part of this land from the Indians, and in 1889 opened it to settlement. At noon on April 22 a pistol shot signaled the opening of the territory, and some 50,000 settlers rushed in to stake their claims in present-day Oklahoma. As the century ended, Indian resistance throughout the West died down, and the government forced the surviving Indians onto reservations.

## **A WAY OF LIFE DESTROYED**

The Indians had lost more than a war. Their way of life had died as well. The Indians had relied on the buffalo herds that roamed the Plains. These animals supplied them with most of their needs—meat for food, hides for clothes and shelter, bones for tools, and much more. Yet railroad crews seeking food killed thousands of buffalo. Professional hunters killed millions of buffalo for their hides. Buffalo

hunting even became a sport. Settlers would shoot buffalo from passing trains, leaving the carcasses to rot in the sun.

Seeing the Indians' dependence on the buffalo, settlers had realized early on that by destroying the buffalo herds they could weaken Indian resistance. As an army officer put it, "Every buffalo dead is an Indian gone." This relentless slaughter had its intended effect. By 1900 only a handful of buffalo survived, down from herds numbering 65 million, and the Indians had been defeated.

Western Indians had struggled to preserve their traditions, but defeat in the wars meant that the Indians were forced onto reservations. Often these reservations occupied poor land, unwanted by white settlers. The Indians were unable to hunt sufficient food or raise adequate crops on the land. They therefore became increasingly dependent on the federal government for food, clothing, and other necessities. Meanwhile, agents of the **Bureau of Indian Affairs**, the government agency charged with caring for the Indians, became notorious for their corruption. Even William W. Belknap, Secretary of War under President Grant, accepted bribes from traders at various Indian posts.

Reports of the harsh conditions faced by Indians began to appear in newspapers and books. Helen Hunt Jackson recorded the failures of government policy in her book *A Century of Dishonor* (1881). Sarah Winnemucca, a Paiute (PY-yoot), traveled across the country pleading for better treatment of the Indians. The message of such reformers began to sink. In 1881 President Chester Arthur made the following observation:

*Though thousands of lives have been sacrificed and hundreds of millions of dollars expended in an attempt to solve the Indian problem, it has...seemed scarcely nearer a solution than it was half a century ago.*

## THE DAWES ACT

White Americans began to develop new ideas about the Indians. One general who had fought against them now declared, "They should be taught the English language, habits of work, the benefits of civilization, and the power of the white race." Reformers came to believe that if the Indians were to survive, they could not hold onto

their ancient traditions. Instead, Indians would have to be **assimilated**—absorbed—into white culture.

To this end, the government tried to stamp out traditional tribal rituals, such as the Sun Dance of the Sioux. To replace the old rituals, the government funded white church organizations to open schools and bring Christianity to the Indians. New boarding schools opened to teach Indian children how to speak, dress, work, and think like whites.

The most significant attack on traditional Indian ways came in 1887, when Congress passed the **Dawes Act**. Reformers of the time hailed it as a "Magna Carta" for Indians. It aimed to speed the "Americanization" of the Indians by undercutting tribal ties. Reservation lands were broken into small plots of 80 and 160 acres and parceled out to families and individuals. Any remaining land was sold to white settlers. The profits were used for Indian schools. Indians who accepted the plots of land could, for the first time, become American citizens.

Under the plan, Indians received 47 million acres of land. Another 90 million acres were sold directly to settlers or land speculators. Many Indians found that they lacked the tools and the training to succeed as farmers. They sold their plots to whites for a fraction of their real value.

Some Indians refused to live on reservations as legal dependents of the federal government. Conditions on the reservations remained harsh, with government-supplied food and clothing often of poor quality. Illness, alcoholism, unemployment, and despair soared.

By 1900 the number of Indians in the United States had dwindled to fewer than 250,000. Not until well into the twentieth century would the federal government recognize the importance of tribal ties to the Indian way of life. Indians would then come to demand recognition of their unique cultural heritage.

## Section 2 The Cowboys and the Ranchers

Long before the Indians had been conquered, cattle ranchers began to move onto the Plains. In time, cattle ranching became big business. Here is an 1880 description of a cattle drive:

*Once begun, it...made a picturesque sight. The leaders were flanked by cowboys on wiry Texas ponies, riding at ease in great saddles with high backs and pommels [hand grips]. At regular distances were other riders, and the progress of the cavalcade was not unlike that of an army on a march.*

The cattle were destined for railroad towns such as Abilene or Dodge City. From there, the animals were loaded into freight cars and sent off to meet their fate in the packing houses of Chicago or Cincinnati. Packing houses still exist, but the cattle drives quickly vanished.

### START OF THE CATTLE INDUSTRY

The cattle industry had its roots in the Mexican territory of Texas during the 1700s. Here colorful cowboys called *vaqueros* (vah-KAYR-oz) rounded up the wild steers that roamed the grasslands of southern Texas. Later, as American settlers moved into Texas, tame and wild cattle mixed, producing hardy breeds such as the famous Texas longhorn. In rounding up the longhorns, American ranchers adopted some of the ways of the *vaqueros*. They learned to rope cattle from horseback and to mark steers for identification with branding irons. Names of equipment and clothing reflect their Mexican origins. “Lariat” comes from *la reata*, or rope. “Chaps” comes from *chaparreras*, or leather overpants.

To turn cattle ranching into a successful business, Americans needed a way to get western herds to markets in the East. The answer came through the expansion of the railroads and the ingenuity of Joseph McCoy, an Illinois livestock shipper. McCoy hit on a scheme whereby Texas ranchers would drive their herds to **railheads**, or shipping stations, along one of the new railroad lines.

Railroad officials scoffed at the idea at first. But McCoy persisted. In 1867 owners of the Hannibal and St. Joseph Railroad agreed to set up a railhead in the sleepy prairie town of Abilene, Kansas. McCoy’s first shipment numbered 20 carloads of Texas longhorns. By the end of 1871, shipments peaked at more than 700,000 cattle.

Soon other railheads opened and the era of the **long drive**, the movement of cattle north from Texas, began. “Cow towns” sprang up at key railheads in Oklahoma, Kansas, and Missouri—the prime shipping centers in the 1870s. During this decade, popular imagination turned the long drive into a romantic event. The rough-and-tumble ways of cowboys became legendary in the East and as far away as Europe.

Life along the trail had little of the glamour described in song and story, however. Cowboys, many of whom were blacks and Mexicans, rode for hours at a time, under a blazing sun and in steady downpours. Every waking moment they strained to hear the first stirrings of a stampede. Explained one cowboy:

*No one could tell what caused a stampede. ...A burst of lightning, a crackling stick, a wolf’s howl, little things in themselves, but in a moment every horned head was lifted, and the mass of hair and horns, with fierce, frightened eyes gleaming like thousands of emeralds, was off...Lashing their ponies...the cowboys followed at breakneck speed,...[hoping] to turn the herd.*

After pushing two to three thousand steers northward, the cowboys rode into a railroad town dusty and tired, their pockets full of hard-earned cash. Some headed straight for a hot bath and a good night’s sleep. Others blew off steam with liquor and gambling. Keeping the peace fell to such well-known marshals as Wyatt Earp and Wild Bill Hickok.

### RANCHING AS A BIG BUSINESS

The era of the great cattle drives ended almost as quickly as it began. Economics was one factor: cattle lost so much weight in their 1,000-mile journey to the railheads that their value fell sharply. Another factor was a law passed in Kansas in 1884. Trying to prevent the spread of disease carried by Texas cattle, Kansas forbade Texas cattle to pass through Kansas except during the winter.

The solution to these problems, it seemed, was to move the railroads nearer the cattle or the cattle nearer the railroads. Both were done. New rail lines were built connecting Texas ranches with cities farther east. Also, many ranchers set up ranches farther north, nearer

the existing railheads. To deal with this region's colder winters, ranchers bred Texas longhorns with eastern cattle to produce a strong, hardy breed.

The further expansion of the railroads, as well as the development of tough new breeds of cattle, produced a thriving business for cattle ranchers throughout the Plains. Their success lured many prospective cattle barons to the West. Land there was virtually free; the cattle and grass were for the taking. Eastern city "dudes" and European investors bought shares in cattle companies and waited for the profits to roll in.

In reality, of course, getting rich proved difficult. Cattle needed water, but the best streams and water holes were controlled by the first ranchers to arrive on the Plains. With each passing year, more farmers and sheepherders arrived, fencing in land with barbed wire and sparking bloody fights with ranchers over land ownership. And even the best grasslands could be overgrazed, leaving little food to fatten herds for the winter months. Ranchers found themselves crowding their many steers onto trampled, heavily grazed grasslands. At the same time, the overproduction of beef had forced down prices.

Bad weather finally undermined the system altogether. A cold winter finally undermined the system altogether. A cold winter in 1885-1886 was followed by an unusually hot and dry summer. As winter again approached, ranchers rushed to sell their weakened herds. Beef prices plummeted. The winter of 1886-1887 proved even nastier than the one before. Tens of thousands of cattle froze or starved to death. Their prized herds destroyed, many ranchers gave up in despair.

As with other industries, such as steel making and oil refining, cattle ranching fell into the hands of a relatively few companies. They reduced the size of herds, fenced the cattle in, and grew hay for winter feeding. Instead of investing in extra cattle, they often bought mowing machines, hay rakes, and tractors. Lamented one veteran cowboy in 1905, "I tell you, times have changed."

### Section 3 Farming the Frontier

In her novel *My Antonia* (1918), Willa Cather described a boy's wagon trip to a farming homestead on the Plains:

I tried to go to sleep, but the jolting made me bite my tongue, and I soon began to ache all over...Cautiously, I slipped from under the buffalo hide, got up on my knees and peered over the side of the wagon. There seemed to be nothing to see; no fences, no creeks or trees, no hills or fields...There was nothing but land: not a country at all, but the material out of which countries are made. No, there was nothing but land...

Farmers trailed behind the cattle ranchers onto the Plains. The farmers would transform the region from a seeming emptiness to a settled land. Their story was one of sweat, aching muscles, uncertainty, and, most of all, determination.

#### WHO WERE THE SETTLERS?

What kind of people "pulled up stakes" and took their chances in the western territories? The settlers represented a cross-section of American society- honest business people and swindlers, former Civil War soldiers, land speculators and the sons and daughters of eastern farmers. And black Americans were attracted by the freedom of the West. A former slave, Benjamin "Pap" Singleton, led a migration of poor southern blacks in what was called the "Exodus of 1879." By the time winter winds began to howl that year, some 15,000 **Exodusters** had reached Kansas, claimed land, and built shelters. Still more blacks started farming in Nebraska and other nearby states.

Many settlers were immigrants from Europe, lured to the United States by American railroad companies. These companies, which had received vast tracts of land to build railroads, now looked to resell this land at a profit. They sent agents to Europe to recruit settlers. Company agents also greeted arriving immigrants at eastern ports with promises of cheap land and instant success.

#### ENCOURAGING SETTLEMENT

Through grants of land and other programs, the federal government also aided western settlement. As early as the 1830s, people had called on the federal government to parcel out public lands to private settlers. Southern states, fearing this would result in the creation of new nonslave states, blocked the idea. But the southern states left the Union in 1861. As the Civil War raged, the way was clear for a new land policy.

In 1862 Congress passed the **Homestead Act**. This measure offered 160 acres of land free to any American citizen who was a family head and over 21. The only conditions were that the settler live on the land for five years and make improvements to it. In the well-watered East, 160 acres was a sizable farm. Yet in the semi-arid West, it was barely enough to support a family. To prosper, a farmer needed at least twice that amount.

Despite these risks, the Homestead Act produced an explosion of settlement. Within a half century after its passage, all western territories had gained enough settlers—at least 60,000—to become states. Most western areas experienced enormous population growth:

	<u>1870</u>	<u>1880</u>	<u>1890</u>
Colorado	39,864	194, 327	413, 429
Kansas	364, 399	996, 096	1,428,108
Montana	20,595	39,159	142,924
Nebraska	122,993	452,402	1,062,656
Wyoming	9,118	20,789	62,555

The Timber Culture Act of 1873 further encouraged settlement. It gave settlers another 160 acres of free land if they agreed to plant trees on at least 40 acres. Four years later, the Desert Land Act gave settlers 640 acres of land at \$1.25 an acre. The settler was required to irrigate the land within three years. For the settler interested in lumber and mining, there was the Timber and Stone Act of 1878. This law also provided land well below the market price.

All these acts were intended to help average citizens start new lives on the frontier. Yet some people took advantage of the government's generosity. Buying land from settlers or directly from the government, speculators made a killing by reselling the land at higher prices. The Federal Land Office did not have enough employees to make certain that the system worked properly.

The federal government encouraged settlement of the West in many ways besides land grants. It set up military posts throughout the West and provided soldiers to protect settlers and help build roads. The Department of Agriculture, created in 1862, searched the world for crops—such as Russian wheat—that would thrive in the conditions found on the Plains. Its scientists also taught farmers new techniques,

such as **dry farming**, a practice designed to gain the most value from every rainfall. Farmers learned that by plowing and planting seeds deeply, and by stirring the topsoil after every rain, they could raise crops despite the lack of rain.

The Hatch Act of 1887 required the Department of Agriculture to set up Experiment Stations, 43 of which were in operation a year later. The stations, located in various parts of the country, worked to solve problems facing farmers. By 1891 they were sending out more than 300 instructive reports per year to about 350,000 farmers.

## **LIFE ON THE FARM**

Despite this help, life on the farm was not for the faint-hearted. Because of the shortage of lumber on the Plains, pioneers there built houses with blocks of **sod**—thickly matted soil. These houses had dirt floors and mud-plastered walls. Even the roofs were usually made of sod. A thin layer of dust and bits of soil often covered everything in the house.

Pioneers fought a year-round battle against the elements. On icy winter days, as winds hurled snow against walls and doors, families huddled around fires indoors and prayed that their fuel would last. Wood was so scarce that many pioneers burned “cow chips”—the dried droppings of cattle and buffalo. Others burned twisted bundles of hay. Summer brought the danger of prairie fires, which raced across the land on hot, dry winds. Sometimes, summer also brought armies of grasshoppers and locusts. These insects devoured everything in their path, from the crops in the field to the clothes on the pioneer's back.

Everyone in a Plains family worked, and worked hard. There were always chores to be done. Fences had to be strung, land plowed, seed planted, crops harvested. Food preserved, animals cared for. Life was often lonely, as the nearest neighbor might be miles away. But loneliness was relieved by farmers' meetings, church dinners, and county fairs.

## **NEW TECHNOLOGY**

Farmers needed more than companionship to help them deal with the special farming conditions that existed on the Plains. New technology came to their rescue.

A semi-arid region that received less than twenty inches of rainfall in a good year, the Plains needed water for development as a



farm and cattle area. Wells could be dug, but they often had to go several hundred feet deep. Yet because the Plains boasted ample wind, farmers could buy windmills to pump out the deep water for irrigation and drinking. American manufacturers succeeded in making the windmill smaller and more reliable.

The development of barbed wire from 1874 to 1890 also made Plains farming more feasible. The Great Plains had few trees. No farmer could raise crops or keep animals without timber to build fences. Barbed wire, however, could be stretched long distances between fence posts. It grew cheaper over the years, costing 90 percent less in 1897 than 1874.

The Plains soil itself, though rich, was tough and difficult to plow. New, advanced plows eased this back-breaking work. In 1837 John Deere invented the first steel plow. Two decades later James Oliver patented an improved version of that plow, one strong enough to furrow the Plains soil. Then in 1880 came the lister. This double plow could move soil in two directions while an attachment planted the seed deeply. Lighter and more effective than earlier plows, these new plows could be pulled by horses as well as oxen.

## LARGE-SCALE FARMING

Inventors and manufacturers devised new and improved equipment for harvesting. These included the twine binder in the 1870s, the “combine” reaper-thresher in the 1880s, and more. As farmers bought up more and more machinery, the making of farm equipment became a major industry. John Deere, McCormick, Reaper, and other companies joined the ranks of big business in the United States. Thanks to the use of heavy machinery, farmers on the Plains not only expanded production but also saved time.

Such time savings encouraged farmers to buy more land and grow more crops. By the late 1880s, farmers were producing more wheat than their markets could handle. Also, farmers throughout the world—in Australia, Canada, and South America—had entered into competition with the Americans. As a result, grain prices fell and many farmers went bankrupt. Gradually, large operators with capital to invest came to dominate the industry.

The most famous of the new **bonanza farms**—large farms financed by outside capital—stretched across the Red River Valley of Minnesota and the Dakotas. One farm, run by Oliver Dalrymple,

measured almost 100,000 acres, several times the size of New York’s Manhattan Island. Like the corporations of the East, bonanza farms could lower their costs through economies of scale. Railroads gave them special bulk shipping rates. Suppliers sold them seed and equipment at discounted prices. These practices earned bonanza farmers huge profits. In one year, for example, Dalrymple grew 25 bushels of wheat per acre and sold it for 90 cents a bushel, or \$22.50 per acre. Since his investment costs were just \$9.50 an acre, Dalrymple earned a profit of \$13 an acre—a return of more than 100 percent.

Many small, independent farmers resented the new bonanza farms. They feared they would be overwhelmed by the large businesses, which could outproduce and undersell them. Small farmers also resented the special treatment that bonanza farms received from railroads and suppliers. Frustrated and angry, farmers would band together in a political movement to defend their interests (Chapter 14).

## FARMERS BEYOND THE PLAINS

To the forty-niners, California’s great Central Valley was but a plain to cross on the way to the gold fields of the Sierra foothills. This level valley is 400 miles long and 40 to 80 miles wide. Rivers carrying the Sierra’s heavy snowmelt cross the valley’s northern part on their way to San Francisco Bay.

By the 1860s Californians had begun to plow up the valley’s fertile meadows and grasslands to raise wheat. For three decades, wheat was California’s largest and most profitable crop, and the state was the second-largest wheat producer in the nation.

Other crops, too, did well in California’s mild climate. A grape and wine industry began to flourish in the valleys near San Francisco Bay. By 1890 growers were raising grapes and raisins in the Central Valley near Fresno. In southern California growers began using irrigation to raise oranges. By the 1880s the first refrigerated railroad cars made it possible to ship fresh produce all across the nation. (The new Florida citrus industry also benefited from these cars.)

During these decades bitter and intense controversies hampered the efforts of Californians to harness river water for irrigation. The basic issue was, who controlled the water? Did miners have the right to wash millions of tons of earth into the rivers and thereby bury downriver farms in mud? Did a landowner have the right to divert water from a river and sell it to others?

These issues were finally settled by government regulation. In 1887 the California legislature authorized the establishment of irrigation districts. These districts, formed by a majority of landowners in the area, had the power to take, store, and distribute water for the benefit of the district as a whole. In 1893 the federal government began to regulate how much debris could be put in a stream. With the establishment of government control over water use, California entered a new era marked by intensive irrigation and the transportation of water. The wheat fields gave way to new, more profitable crops made possible by irrigation.

## Section 4 Mining and Lumbering

“Gold!” That cry could stir people like none other. Often it made people abandon homes and loved ones and rush off to seek fame and fortune. When news of the 1848 strike at Sutter’s Mill (page 223) hit one California town, an observer wrote, “An American woman who had recently established a boarding-house here pulled up stakes and was off before her lodgers had even time to pay their bills.”

The West saw many gold and silver rushes in the second half of the nineteenth century. Miners by the thousands poured into the West in search of precious metals. Another natural resource of the region—its rich timber supply—would lure still other workers. Meanwhile, western resources would help speed the Industrial Revolution. The gold and silver from western mines would provide capital to build industries.

### PROSPECTORS AND BOOM TOWNS

The dream of finding precious metals beckoned people from near and far. Margaret Frink was one of thousands eager to “strike it rich.” All across the Plains, she and her husband worried that “there would only be a few barrels of gold left for us when we got to California.”

Prospectors such as the Frinks needed little experience and almost no capital. **Placer mining**—mining the deposits of a stream bed—could be done with a shovel, a washpan, and a good pair of eyes. (Hydraulic mining, a kind of placer mining in which miners blasted hillsides with thousands of gallons of water to wash gold-bearing soil

and gravel into troughs, was more effective. It was also more expensive, however.)

Few of the early prospectors actually found much gold. Undaunted, they moved on to new sites. From California, many rushed to Colorado after the Pikes Peak gold strike of 1858-1859. Others headed for Nevada. Each prospector dreamed of the luck of Henry Comstock, whose claims in Nevada in 1859 ultimately brought forth hundreds of millions of dollars in gold and silver.

The fabulous Comstock Lode created the most colorful city in all the West—Virginia City, Nevada. Here is how Mark Twain described the town in his book *Roughing It* (1872):

*The sidewalks swarmed with people...Buggies frequently had to wait half an hour for an opportunity to cross the principal street...There was a glad, almost fierce, intensity in every eye, that told of the money-getting schemes that were seething in every brain and the high hope that held sway in every heart.*

Other mining towns sprang up as the search for gold spread—Bannack, Montana (1862); South Pass, Wyoming (1867); Juneau, Alaska (1880). The towns grew so fast that territorial governments had no time to create law and order, so the miners made their own. They met to set rules for claims and to settle disputes. Nevertheless, gunfights and lynchings often made justice quick and final.

The last mass effort of individual prospectors to strike it rich occurred in 1875, at Deadwood Gulch in the Black Hills of the Dakota Territory. Men and women with a taste for excitement roared into town, giving Deadwood Gulch a reputation for shootouts and sin. A hillside cemetery overlooking the town boasted as residents such well-known figures as Potato Creek Johnny and Calamity Jane.

The booming mining industry spawned new consumer businesses. Levi Strauss intended to sell California miners sturdy canvas for tents. Miners, however, were more interested in practical clothes that would last. Strauss came up with trousers riveted together at key points to withstand great stress. “Levi’s” remained popular long after the mining frontier had ended. James Cash Penney set up what he called “Golden Rule Stores,” meaning that they would treat customers as you would want other people to treat you. J.C. Penney stores later spread throughout the nation.



## THE BUSINESS OF MINING

Despite the wild stories of instant wealth, few individual miners prospered. Even Henry Comstock did not get rich from his famous discoveries. He sold one valuable claim on the Comstock Lode for \$40. He received just \$10,000 for his share of the richest claim, and died penniless.

There really was little a lone prospector like Comstock could do to exploit the riches he might uncover. Most gold and silver lay embedded in quartz rock beneath the surface. The only way to get at it was through **quartz mining**. This process involved blasting the rock from a mountainside and then crushing it to separate the gold from the surrounding rock. Such work required heavy machinery and many hired hands. Very few prospectors could afford either the equipment or the workers. Most sold out to a mining company.

The large mining companies hired hundreds of unskilled laborers. These included recent immigrants from the East as well as Mexican and Chinese laborers who had helped lay track for western railroads. For these laborers, the work was hard and the pay poor; most of the profits went to the mine owners.

## OTHER RICHES FROM THE EARTH

The mining companies saw value in other western mineral deposits. Minerals such as copper, lead, and borax were becoming increasingly important to the United States' growing industries. Once electric power came into use, copper became an essential metal for wiring. The Anaconda Copper Company, founded in 1881 in Montana, grew into one of the nation's largest mining concerns.

Large firms also mined lead in places like Idaho and Utah, and borax in Death Valley, California. Industry used lead to form strong alloys and to make electrical cables, paints, and pipes. Borax, a chemical compound, was needed in the making of ceramics and glass. Railroad freight cars of the late 1800s rolled eastward carrying cargoes of western ores often as valuable as gold or silver.

## THE LUMBER INDUSTRY

The West offered more than mineral resources. The Pacific region of Washington, Oregon, and California could exploit a living resource—the California redwoods, Douglas fir, and other trees. Before the Civil

War the lumber industry had centered around the Great Lakes, but as settlers moved west, so did the loggers. Lumber towns, as rowdy and ramshackle as cow towns or mining towns, sprang up near the forests.

The loggers found plenty of work. The West's growing population needed boards to build houses as well as thick timbers to shore up mine tunnels. As early as 1865, a dozen or more sawmills buzzed away in Washington. By the 1880s the northwestern lumber industry was in full swing. Ships carried lumber to California, the Hawaiian islands, and even around the tip of South America to the states along the East Coast.

The best trees were huge. The trunks of Douglas fir trees were 8 to 10 feet thick, and redwoods could have a diameter of 20 to 30 feet. The first limbs of either tree could be as high as 100 feet above the ground. Using special kinds of axes, loggers worked in pairs to fell the trees. Horses or oxen dragged the downed trees to a river. Then came the arduous **log drive**, by which the logs were floated downstream to a sawmill.

After 1880, a new technology raised lumber production dramatically. One invention, the donkey engine, used a steam engine to power a giant pulley to move logs. Another new device used a small railroad engine to pull logs quickly and easily to sawmills. By 1900 Oregon's foresters were producing more than five times as much lumber as they had twenty years earlier.

Lumbering, like mining, required heavy investments in machinery and workers. Not surprisingly, a few large corporations came to dominate the industry. The Weyerhaeuser Company became a leading lumber and papermaking firm in the Northwest.

## ALASKA: THE LAST FRONTIER

Mining and lumbering played important parts in the development of the nation's last frontier region: Alaska. Secretary of State William Seward bought Alaska from Russia in 1867. Though the United States paid less than two cents per acre for the huge region, skeptics laughed at the purchase. Regarding Alaska as a frigid wasteland, they called it "Icebergia" and "Seward's Folly." Seward was quick to point out that *Alaska* meant "great land" in the language of the Aleuts who lived there.

Alaska received little attention at first. For seventeen years, the federal government left Alaska's administration up to the army, the

navy, or customs collectors. The discovery of gold put Alaska on the map. In 1880 two prospectors spied the glitter of yellow metal in a creek in southern Alaska. More miners soon rushed in. Juneau and nearby towns sprang up.

As in California, corporate mining followed close on the heels of lone prospectors. While prospectors searched in vain for rich new placer deposits, the Alaska Mill and Mining Company set up quartz mining operations near Juneau.

In 1896 an American named George Carmack and his two Indian brothers-in-law came upon another deposit of gold. Their find was in the Klondike, a region of Canada along the Alaskan border. Thus began the great Yukon and Alaska gold rush. Tens of thousands of miners poured in, finding gold at Nome in 1899 and at Fairbanks in 1902. Alaska's white population multiplied nine times between 1890 and 1910.

Settlers soon learned that Alaska had much to offer besides gold. Fur-bearing animals like mink, fur seal, beaver, muskrat, and sable abounded. Fish were plentiful, and timber, copper, and coal seemed unlimited. Companies moved in to take advantage of these resources. Yet long after other parts of the West had been developed, Alaska continued to provide Americans with a glimpse of life on the frontier.

## Section 5 The Impact of the Frontier

In 1890 the United States Census Director noted that it was no longer possible to draw a line of advancing settlement across a map of the West. "The unsettled area has been so broken into by isolated bodies of settlement that there can hardly be said to be a frontier line," he observed. In short, the frontier had vanished. Pioneer days, it seemed, were gone forever.

Americans had different reactions to the passing of the frontier. Some sought to change the West into something new and modern. Others hoped to make the Old West live on. The struggle between these conflicting ideas lives on today.

## THE WEST AND THE AMERICAN CHARACTER

Would the absence of a frontier pose a threat to America's unique qualities as a nation? Some people thought so. Frederick Jackson Turner, a young historian at the University of Wisconsin, published in 1893 what became known as the **Turner thesis**. Turner claimed that the frontier had distinguished the United States from Europe. It had, he said, molded the democratic American spirit. Turner contended:

*The advance of the frontier has meant a steady movement away from the influence of Europe, a steady growth of independence on American lines. And to study this advance...is to study the really American part of our history.*

As long as the West remained unsettled, Americans could always begin new lives in new lands. In a sense, the West had been a "gate of escape," a safety valve. Turner wrote:

*This perennial rebirth, this fluidity of American life, this expansion westward with its new opportunities, its continuous touch with the simplicity of primitive society, furnish the forces driving [the] American character.*

The Turner thesis had a profound influence on American thought. Later historians, however, began to challenge Turner's argument. First, they said, the West had never been a safety valve for the East's many low-paid workers. These people could rarely afford the trip west or the tools needed to begin an independent life. Second, while some unhappy easterners did move west, the opposite also occurred. Many westerners moved east in search of better-paying jobs and security. These and other questions are still being debated today.

## VISIONS OF THE WEST

Most Americans, of course, did not think of the West as a safety valve. They saw it as a land of excitement and bravery. They learned about the West mainly through so-called **dime novels**, cheap and plentiful books from popular fiction writers after the Civil War. These books enthralled readers who had never been west of the Mississippi (or even the Hudson!). Cowboys and Indians stormed across the pages in one thrilling episode after another.

In 1873 William F. Cody burst upon the American scene in a stage play called “Scouts of the Prairies”. Known as Buffalo Bill, Cody was a former scout and buffalo hunter. He had also ridden for the Pony Express, carrying mail on the long journey from Missouri to California. Cody was most famous, though, as an Indian fighter, having killed Chief Yellow Hand in the Battle of Yellow Creek.

The public received Cody so warmly that he started his own “Wild West show” and toured the country for the next 30 years. Cody’s show featured real cowboys twirling lariats, busting broncos, and firing pistols. It also included Indians such as Sitting Bull, who had defeated General Custer in 1876.

Romantic notions of the West remained popular far into the twentieth century. Owen Wister’s novel *The Virginian* (1902) set the standard for a literary genre known as the “Western.” *The Virginian* told of the growing love between a rough cowboy and a pretty schoolteacher from Vermont. Later writers like Zane Grey and Louis L’Amour carried on the tradition of the Western novel. Radio, movies, and television did their parts to recall “the thrilling days of yesteryear.”

Some artists created vivid visual images of the West. The etchings and painting of Thomas Moran and the photography of Edward S. Curtis excited the interest of Americans. Born in England, Moran came to America and joined survey crews mapping the West. At the same time, he painted western scenes, most notably of the Grand Canyon and the Yellowstone area of Wyoming. His fellow surveyors called him “T. Yellowstone Moran.”

Curtis, born in Wisconsin, made his reputation in the Pacific Northwest. His most famous work was a 20-volume study of American Indians, with 1,500 photographs. Curtis believed that unless he provided a photographic record of the many tribes, future Americans would know little about them.

## CONSERVING THE LAND

People like Moran and Curtis tried to preserve the West through art. Others struggled to preserve western lands themselves. Parts of the West contained wonders that dazzled the mind. One of the most stunning areas lay in what is now western Wyoming.

In 1807 a man named John Colter was roaming the Rockies. On a high plateau drained by the Yellowstone River, Colter gazed in awe at columns of steam and hot water erupting high into the air.

Colter had stumbled upon a natural marvel—a volcanic plateau seething with thermal pools and geysers.

Some 60 years later, a government expedition entered the area. It found that Yellowstone not only contained unique geological features but also teemed with wildlife. There were black bears and bison, birds, and fish. Something had to be done to protect the natural beauty of the area, expedition leaders felt. They wanted to prevent the kind of commercial exploitation that had marred eastern landmarks like Niagara Falls.

Congress agreed. In 1872 Congress made Yellowstone the world’s first national park. Other parks were later set up, and in 1916 Congress created the **National Park Service** to run these protected areas.

The establishment of national parks reflected a new mood in the United States. As Frederick Jackson Turner had pointed out, Americans had always been wasteful. Settlers could afford to ruin the lands around them because there was always more land available on the frontier. But now the frontier was closed. **Conservation**—the preservation and wise use of the nation’s natural resources—was necessary.

Conservationists had seen western mining companies tear down mountains with hydraulic mining. In the forests, lumber companies cleared huge areas of land in their search for timber. They took no steps to preserve young saplings. Neither did they protect wildlife or prevent forest fires. By the end of the 1800s, they had cut 800 million acres of forest land—80 percent of the nation’s original forests.

The government, conservationists held, should protect the nation’s resources for future generations. They won a key victory in 1891 when Congress passed the Forest Reserve Act. This measure authorized the President to protect timber areas on federally owned lands.

John Muir (MYUR), a Scottish immigrant, played a leading role in the conservation movement. He roamed the West, discovering new wonders and urging federal action to preserve them. In 1892 Muir founded the Sierra Club, an organization that helped keep the conservation movement going.

Many similar groups were formed in the twentieth century. Americans increasingly recognized that the nation’s natural resources,

in the West and elsewhere, could not be treated simply as fuel for American industry. An irreplaceable part of America's heritage, the land had to be used wisely, not squandered out of greed or carelessness. In one sense the Indians, who viewed themselves as caretakers of the earth, had prevailed.